

AMENDMENTS TO THE SPECIFICATION

The title has been amended to read:

~~METHOD FOR PRODUCING A MULTILAYER SEAL AND MULTILAYER SEAL
THEREBY OBTAINED~~ A MULTILAYER BELLOWS SEAL AND A METHOD FOR
PRODUCING A MULTILAYER BELLOWS SEAL

Page 1, paragraph 1 has been amended to read:

The present invention concerns a multi layer bellows seal and a method for producing a multilayer bellows seal.

Page 1, paragraph 9 (bridging pages 1 and 2) has been amended to read:

EP 945,658 discloses a multilayer bellows seal in which the volume created in the gap between the layers of the multilayer seal bellows is sealed and put in communication with a pressure detector ~~signalling~~ signaling pressure changes, if any, due to leaks in the inner or the outer layers. To this end, the pressure inside the gap is previously increased or decreased relative to atmospheric pressure.

Page 3, paragraph 7 has been amended to read:

Once said faces have been shaped so as to create the superimposed layers of a multilayer seal, the method of the invention comprises bringing the pressure in the volume confined between said layers to a preset value, and then connecting such a volume to a system ~~signalling~~ signaling pressure changes.

Page 4, paragraph 2 has been amended to read:

Moreover, ~~pressurisation~~ pressurization allows using a tracing fluid to fill the volume confined between the seal layers, so that a further means is available to signal the possible loss of integrity of the seal.

Page 4, paragraph 4 has been amended to read:

The adhesion obtained between the layers allows handling such layers as a single, compact structure. Thus, the vibrations to which the seal is submitted will have lower frequency than when gaps are present between the different layers, with ~~favourable~~ favorable consequences on the duration of the seal operating life.

Page 5, the first full paragraph has been amended to read:

In the final seal structure, the channels initially formed on the seal faces form the only interstices between the different layers and form a conducting system for the ~~pressurised~~ pressurized fluid or the vacuum within the multilayer seal.

Page 5, paragraph 4 has been amended to read:

Consequently, ~~being~~ the channels being shallow, the volume where pressure is to be brought to a predetermined level (for instance, the volume from which air is to be drawn to create the vacuum) is a minimum volume. That feature affords considerable advantages over the known solutions where a gap is provided between the different seal layers. First, it is possible to have an economical saving when manufacturing the seals, since it is sufficient to create a set of channels, even with coarse working techniques, in place of an actual chamber, and since the volume of fluid being drawn or pumped to bring pressure to a preset value is lower. Second, a system is obtained where the response time to possible leaks is far shorter.

Page 7, paragraph 5 has been amended to read:

To this end, the diameter of inner cylindrical body 1 will be slightly smaller than that of outer cylindrical body 1', and yet it will be such as to ensure the perfect adhesion of both cylindrical bodies by ~~minimising~~ minimizing volume 23 (here enlarged for sake of clarity of the description) provided between the faces of cylindrical bodies 1, 1'.

Page 12, paragraph 6 has been amended to read:

As to the manner of forming said channels 3 and to their ~~geometries~~ geometry, the considerations made above in case of applications to cylindrical seals are still valid.

Page 13, paragraph 6 has been amended to read:

Also in this case, due to the extremely small volume confined between the layers of membrane 49, any loss of integrity of the multilayer membrane is effectively ~~signalled~~ signaled, so as to reduce the risk of leaks and of consequent damages to pressure gauge 57.